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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,818	02/19/2002	David Arthur Grosvenor	30003580-2	7126

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EXAMINER	
NGUYEN, KIMBINH T	

ART UNIT	PAPER NUMBER
2671	6

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/078,818	GROSVENOR ET AL.	
	Examiner	Art Unit	
	Kimbinh T. Nguyen	2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to amendment filed 12/31/03.

2. Claims 1-19 are pending in the application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 13, 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al. (6,587,119).

Claim 1, Anderson et al. discloses method and apparatus for displaying a digital image (col. 2, lines 56-57; lines 65-670, comprising: acquiring a set of image data of displayable static image (digital still image; col. 4, lines 62-64); using a processing means (using CPU 344 to control various processes of camera 110; the captured images are processed in the background; CPU 244 run a operating apparatus that includes a menu-driven GUI and provide image processing through software; col. 3, lines 20-36) to perform an analysis of the image data to identify characteristics of the image content (multiple images, a panorama image, a burst image, a time lapse image. A panorama image comprises overlapping images of a larger scene; col. 4, line 63

through col. 5, line 5); generating a set of video data (col. 2, lines 57-67), a set of video data for output to a display device (LCD) connected to the CPU (col. 3, lines 13-44), the video data representing displayable motion over the static image and generating in accordance with the image content characteristics (col. 5, lines 6-32).

Claim 13, Anderson et al. discloses the image data is representative of a displayable photograph (capturing high quality static photographs; col. 1, lines 36-37).

Claim 15, the rationale provided in the rejection of claim 1 is incorporated herein. In addition, Anderson teaches a computer readable medium (col. 3, lines 45-51).

Claim 16, Anderson et al. discloses a processor (microprocessor), a data port (input/output) and video port (camera) the processor receives image data (input), performs identifying characteristics of the image content (col. 4, lines 64-67), generating and output the video data (col. 2, lines 57-67).

Claim 17, the rationale provided in the rejection of claim 16 is incorporated herein. In addition, Anderson et al. teaches using the processor to automatically perform an analysis of the image (CPU 344 is capable of currently running multiple software routines to control the various processes of camera; CPU 244 runs an operating apparatus that includes a menu-drive GUI and provides image processing through software; col. 3, lines 22-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 9, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Martin et al. (6,256,061).

Claim 2, Anderson et al. does not teach executing an algorithm; however, Martin et al. discloses determining predefined image characteristics presented in the image (hemispherical/spherical image, a high resolution still image; col. 4, lines 1-3), executing an algorithm (the ASCII command file or command sequencing data file; col. 3, line 63 64; col. 4, lines 4-13) associated with characteristics identified, the algorithm defining rules (instructions or command) for generating a moving object over the image (col. 9, lines 35-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an algorithm which defines the rules as taught by Martin into a digital imaging device of Anderson's method for analyzing a still image during interactive movie creation, because it would provide video-motion rate images via low bandwidth digital transmissions from a still image taken (see abstract).

Claim 9, Anderson et al. discloses identifying a predefined image class, in that there is dominant edge, line or curve (panning path, a curve fitting function (col. 8, lines 42-49; figs. 9G, 9H), Anderson does not teach executing an algorithm; however, Martin teaches executing an algorithm for determining a display path following dominant edge, line or curve (col. 10, lines 24-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the command sequencing data file as taught by Martin into defining a panning and zooming path across a still image of

Anderson's system for provide an algorithm associated with predefined image, because it would provide video motion rate images via low bandwidth digital transmissions or small data files from a still image taken of an inanimate environment (abstract).

Claim 11, the rationale provided in the rejection of claim 2 is incorporated herein. In addition, Martin teaches prompting the user manually (instruction how to select the image portions) to select an option in a sub-level (col. 10, lines 21-23). Martin does not teach selecting an option in a sub-level; however, Martin teaches selecting image portions (col. 9, lines 37-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the selecting image portions as taught by Martin's teaching, because it would allow a user may take control of the tour of the displayed image and explore the image on his own (col. 3, lines 42-43).

Claim 18, the rationale provided in the rejection of claims 2 and 17 is incorporated herein.

6. Claims 3, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Martin et al. (6,256,061), and further in view of Lau et al. (6,633,309).

Claim 3, Anderson does not teach sub-parts of the image; however, Lau et al. discloses identifying a predefined image class (col. 5, lines 52-60), in that image class, sub-parts of the image (sub-objects) have predefined characteristics (col. 10, lines 47-50), establishing index frames based on a close-up view of sub-part (col. 2, lines 15-22), executing an algorithm (a software program) to determine a display path from one to index frame to the next (col. 5, lines 25-31). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to incorporate the identifying a predefined image, viewing a close-up image as taught by Lau into a method of defining the position of the key frames on the still image of Anderson's teaching, because it would allow an operator is able to view a close-up location in the zoom window (col. 2, lines 17-18).

Claim 10, the rationale provided in the rejection of claims 3 and 9 is incorporated herein.

Claim 19, the rationale provided in the rejection of claims 3 and 17 is incorporated herein.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Martin et al. (6,256,061), Lau et al. (6,633,309) and further in view of Madrane (6,573,907).

Claim 4, Anderson does not teach an order of index frame; however, Madrane discloses determining the order of index frames to be displayed (col. 1, lines 62-64; figs. 3, 4); the amount of time for each index frame, the transition between each index frame (col. 1, lines 27-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the order of index frame as taught by Madrane into the method of defining the key frame's position onto the still image of Anderson's teaching, because it would develop in the fields of video indexing and video editing (col. 1, lines 62-64).

8. Claims 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Martin et al. (6,256,061), Lau et al. (6,633,309) and further in view of Foote et al. (6,404,925).

Claims 5, 6, Anderson does not teach performing a feature recognition identifies human facial features; however, Foote et al. discloses identifying regions of interest (col. 24, lines 45-47) and performing a feature recognition identifies human facial features, index frame based on a close-up view of identified facial features (col. 20, lines 35-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the region of interest as taught by Foote into the method of defining the key frame's position onto the still image of Anderson's teaching, because selecting video regions that allows visualizing as well as supporting non-contiguous selection (col. 24, lines 31-33).

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Martin et al. (6,256,061), Lau et al. (6,633,309), Madrane (6,573,907) and further in view of Foote et al. (6,404,925), Terashita et al. (5,128,711)

Claim 7, Anderson does not teach a database of pre-stored facial features for facial features already present in the database; however, Terashita et al. comparing the facial features with a database of pre-stored facial features for facial features already present in the database (col. 2, lines 55-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate comparing the facial feature as taught by Terashita into the key frame's position onto the still image of

Anderson's teaching, because it would detect correctly facial image without requiring a difficult operation (col. 2, lines 60-62).

Claim 8, Anderson et al. determining the orientation of the facial features, generating a display path (path of panning) which follows the general gaze direction which the facial features exhibit (col. 5, lines 42-52; fig. 4B).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Uchihachi et al. (6,535,639).

Claim 12, Anderson does not teach generating video data of video sub-clips; however, Uchihachi et al. discloses generating video data of video sub-clips (video was divided into 69 segments or shots), each sub-clip representing displayable motion over a different part of the static image, editing for linking the sub-clips to form a second set of video data (col. 4, line 65 through col. 5, line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate video sub-clip as taught by Uchihachi into defining a panning and zooming path across a still image of Anderson's system, because it would create segments (video clip) from the same cluster ID (abstract).

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (6,587,119) in view of Madrane (6,573,907).

Claim 14, Anderson does not teach the initial and end frames representing salient parts of the image; however, Madrane discloses the data is representative of panning motion, the initial and end frames representing salient parts of the image (salient still; col. 3, lines 38-56). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to incorporate the salient still as taught by Madrane into defining a panning and zooming path across a still image of Anderson's system for provide a salient still of the video sequence, because it would provide a composite image called salient still, representative of the video sequence (col. 3, lines 51-53).

Response to Arguments

12. Applicant's arguments filed 12/31/03 have been fully considered but they are not persuasive, because Anderson's reference and the combination of the applied prior art Martin et al. Lau et al., Uchihachi et al., Foote et al., Madrane and Terashita et al., either singularly or in combination show all the limitations of the claim invention and render claims 1-19 obvious.

With respect to Applicant's arguments of independent claims 1, 15, 16, 17 and 18; Claims 1, 16, 17 and 18, Anderson teaches a method and apparatus of displaying a digital image (still image), using CPU 344 may include a microprocessor device for processing digital image (processing means); in addition, Anderson teaches in a preferred embodiment, CPU 244 runs an operating apparatus that includes a menu-drive GUI and provides image processing through software (using processing means to analyze the image data (col. 3, lines 22-30). "Processing" is the manipulation of data within a computer system. Processing is the vital step between receiving data (input), generating and producing results (output). This procedure is shown by Anderson's reference in fig. 3 to analyze a still image during movie creation.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kimbinh Nguyen** whose telephone number is **(703) 305-9683**. The examiner can normally be reached **(Monday- Thursday from 7:00 AM to 4:30 PM and alternate Fridays from 7:00 AM to 3:30 PM)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Part II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimbinh Nguyen

February 24, 2004

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600